

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace, without prejudice, all prior versions, and listings, or claims in the application.

LISTING OF CLAIMS:

Claims 1-17 (Canceled).

18. (Previously Presented) An apparatus for fluorescence observation comprising an excitation filter which transmits only exciting light of a specific wavelength among illumination light, and an absorption filter which blocks the exciting light and transmits only fluorescence generated from a specimen when the exciting light is irradiated to the specimen, wherein the excitation filter and/or the absorption filter containing multilayer film having 90 or more layers and an interval of a half value wavelength at a long-wavelength side of the excitation filter and a half value wavelength at a short-wavelength side of the absorption filter is in a width between 1nm to 6nm, and change of the half value wavelength of the excitation filter and the absorption filter when humidity changes from 10% to 95%, is 0.5nm or less.

19. (Previously Presented) The apparatus for fluorescence observation according to claim 18, wherein the excitation filter and the absorption filter have a multilayer film respectively, the multilayer film includes SiO₂ which is a low refractive index film, and Ta₂O₅, Nb₂O₅ or TiO₂, or a mixed film composed of mixture of any of these, each of which is a high refractive index film.

20. (Previously Presented) The apparatus for fluorescence observation according to claim 18, wherein the apparatus is incorporated in an optical system of a microscope.

21. (Previously Presented) The apparatus for fluorescence observation according to claim 18, wherein the apparatus is incorporated in an optical system of an endoscope.

22. (Currently Amended) An apparatus for fluorescence observation comprising laser light used as exciting light, and an absorption filter which blocks the exciting light and transmits only the fluorescence generated from a specimen ~~when the exciting light is irradiated to the specimen~~ with the exciting light,

wherein the absorption filter ~~contains~~ includes a multilayer film having 90 or more film layers, and an interval ~~of~~ between a wavelength of the laser light and a half-value wavelength ~~at a short-wavelength side~~ of the absorption filter on a short-wavelength side is within a width between 1nm to 12nm.

23. (Currently Amended) The apparatus for fluorescence observation according to claim 22, wherein ~~an~~ the interval ~~of~~ between the wavelength of the laser light and a the half-value wavelength ~~at a short-wavelength side~~ of the absorption filter on the short-wavelength side is within a width between 6 nm to 12 nm.

24. (Previously Presented) The apparatus for fluorescence observation according to claim 22, wherein change of the half-value wavelength of the absorption filter when humidity changes from 10% to 95%, is 0.5 nm or less.

25. (Currently Amended) The apparatus for fluorescence observation according to claim 22, wherein a the multilayer ~~in which films are alternately laminated composing film~~ of the absorption filter, is ~~constructed such that a~~ laminated of alternately arranged low refractive index ~~film which is SiO₂, films made of SiO₂ and a high refractive index film which is Ta₂O₅, Nb₂O₅, or TiO₂, or a mixed film of any of these~~ films made of one of or any mixture of Ta₂O₅, Nb₂O₅ and TiO₂, and the multilayer film is applied to at least one surface of a substrate of the absorption filter ~~contains the multilayer in which films are alternately laminated.~~

26. (Previously Presented) The apparatus for fluorescence observation according to claim

18, wherein the excitation filter comprises, at least a long wave pass filter, a short wave pass filter, and two or more substrates, and the long wave pass filter and the short wave pass filter are formed as a film on different substrates mentioned above, respectively.

27. (Previously Presented) An apparatus for fluorescence observation comprising an excitation filter in which transmits only exciting light of specific wavelength out of an illumination light, and an absorption filter which transmits only fluorescence generated from the specimen and blocks the exciting light when the exciting light is illuminated on the specimen, wherein the excitation filter and/or the absorption filter containing multilayer film having 90 or more layers, and the excitation filter and the absorption filter are constructed so as to have such characteristic that an interval between a half value wavelength at a long-wavelength side of the excitation filter and a half value wavelength at a short-wavelength side of the absorption filter is within a width between 1 to 6nm, and an interval between a half value wavelength at the long-wavelength side of the excitation filter having transmittance 0.1% and a half-value wavelength at the short-wavelength side of the excitation filter is within a width between 0.1 to 5.9nm, and an interval between a wavelength at the short-wavelength side of the absorption filter having transmittance 0.1% and a half-value wavelength at the short-wavelength side of the absorption filter is in a width between 0.1 to 5.9nm, and an interval between a half-value wavelength at the long-wavelength side of the excitation filter having transmittance 80% and a wavelength at the long-wavelength side of the excitation filter is 5.9nm or less, and an interval between a half value wavelength at the short-wavelength side of the absorption filter and a wavelength at the short-wavelength side of the absorption filter having transmittance 80% is 5.9nm or less.

28. (Previously Presented) The apparatus for fluorescence observation according to claim 27, wherein change of the half-value wavelength of the excitation filter and the absorption filter when humidity changes from 10% to 95%, is 0.5nm or less.

29. (Previously Presented) The apparatus for fluorescence observation according to claim 27, wherein a multilayer in which films are alternately laminated composing of the excitation filter and the absorption filter, is constructed such that a low refractive index film which is SiO₂, and a high refractive index film which is Ta₂O₅, Nb₂O₅, or TiO₂, or a mixed film of any of these, and at least one surface of the excitation filter and at least one surface of the

absorption filter contain the multilayer in which films are alternately laminated.

30. (Previously Presented) The apparatus for fluorescence observation according to claim 27, wherein the apparatus is incorporated in an optical system of a microscope.

31. (Previously Presented) The apparatus for fluorescence observation according to claim 27, wherein the apparatus is incorporated in an optical system of an endoscope.